

Amendments to the Claims:

1. (Currently Amended) An antimicrobial and chemical deactivating composition for use in a liquid medium or for incorporation into a coating, ~~or structural plastic materials~~material, thin microporous ~~membranes~~membrane, ~~or textile~~textile, or ~~sponges~~sponge, said composition comprising ~~comprised of~~ nanosize or submicron particles of silver, silver-copper alloy, ~~nano size~~ platinum with silver and their salts with parabens, oxide, salicylate, acetate, citrate, benzoate, and phosphate along with chemical compounds of copper, iron, molybdenum and zinc Pyrrhione ~~zinc salts of the same.~~

2. (Currently Amended) An antimicrobial composition comprising ~~of~~ nanosize or submicron size silver, silver-copper alloy, ~~platinum~~, copper, iron, molybdenum ~~zinc and/or its salts with oxide, salicylate, acetate, citrate, benzoate, and phosphate and Zinc~~ zinc Pyrrhione as a powder, dispersion or as an encapsulated composition with a suitable polymeric hydrogel selected from a group of acrylates ~~such as phema~~, hydrophilic polyurethanes, polyvinyl alcohol, natural biopolymers ~~such as alginates~~, polyacetic acid, and acrylamides.

3. (Canceled)

4. (Currently Amended) A method for reducing the exposure to, or for deactivating chemical and biological warfare agents, and other toxic ~~oranic~~ organic vapors at the surfaces of materials, comprising ~~of incorporation of the~~ incorporating an antimicrobial and a chemical deactivating agent ~~above compositions~~ in porous fluropolymers with a sandwich layer or crosslinked polyvinyl alcohol or vinylalcohol copolymers with plasticizers and additives with the cross linking agents glyoxal, formaldehyde, and titanium triamino isopropoxide.


5. (New) An antimicrobial and chemical deactivating material comprising:
a laminating layer for providing a physical barrier to chemical vapors
while permitting moisture to pass through said layer;
catalytic material deposited on said laminating layer to provide chemical
deactivation;
an antimicrobial deposited on said catalytic materials.
6. (New) The antimicrobial and chemical deactivating material of claim 5 wherein
said laminating layer, said catalytic material and said antimicrobial are carbon free.
7. (New) The antimicrobial and chemical deactivating material of claim 5 further
comprising an assembly of positively charged polymers self assembling with negatively charged
polymers to form a water insouble electrostatic barrier.
8. (New) The antimicrobial and chemical deactivating material of claim 5 wherein
said laminating layer comprises polyvinylalcohol applied to a PTFE film.
9. (New) An antimicrobial and chemical deactivating material comprising:
a laminating layer for providing a physical barrier to chemical vapors
while permitting moisture to pass through said layer;
catalytic material deposited on said laminating layer to provide chemical
deactivation.
10. (New) The antimicrobial and chemical deactivating material of claim 9 wherein
said laminating layer, said catalytic material and said antimicrobial are carbon free.
11. (New) The antimicrobial and chemical deactivating material of claim 9 further
comprising an assembly of positively charged polymers self assembling with negatively charged
polymers to form a water insouble electrostatic barrier.

12. (New) The antimicrobial and chemical deactivating material of claim 9 wherein said laminating layer comprises polyvinylalcohol applied to a PTFE film.

13. (New) An antimicrobial and chemical deactivating material comprising:
a laminating layer for providing a physical barrier to chemical vapors
while permitting moisture to pass through said layer;
an antimicrobial deposited on said catalytic materials.

14. (New) The antimicrobial and chemical deactivating material of claim 13 wherein said laminating layer, said catalytic material and said antimicrobial are carbon free.

15. (New) The antimicrobial and chemical deactivating material of claim 13 further comprising an assembly of positively charged polymers self assembling with negatively charged polymers to form a water insouble electrostatic barrier.

 16. (New) The antimicrobial and chemical deactivating material of claim 13 wherein said laminating layer comprises polyvinylalcohol applied to a PTFE film.

17. (New) An antimicrobial and chemical deactivating mixture comprising:
catalytic material for providing chemical deactivation;
an antimicrobial;
polyvinyl alcohol;
wherein said catalytic material, antimicrobial and polyvinyl alcohol are blended to form said mixture.

18. (New) An antimicrobial and chemical deactivating material comprising:
a laminating layer of plasma treated polyvinyl alcohol for providing a physical barrier to chemical vapors while permitting moisture to pass through said layer;
catalytic material deposited on said laminating layer to provide chemical deactivation;
an antimicrobial deposited on said catalytic materials.

19. (New) The antimicrobial and chemical deactivating material of claim 18 wherein said laminating layer, said catalytic material and said antimicrobial are carbon free.

20. (New) An antimicrobial and chemical deactivating textile finish coating comprising:

polyurethane;

an antimicrobial blended with said polyurethane.